

Remarks

Claims 1-51, 53, 54, 56, 58 and 59 are pending. Claims 1, 50, 53, 54 and 56 have been amended. Claims 52, 55, 57 and 60-63 have been canceled without prejudice to Applicants' right to pursue the subject matter of the claims at a later time. Claims 9, 10, 30, 31, 58 and 59 have been withdrawn from consideration as being drawn to a non-elected species. Claims 1, 50, 53, 54 and 56 were amended to more clearly claim what applicants consider to be their invention.

Claims 1 and 56 were amended to recite storage of data representing graphs, biological molecules and/or relationships between biological molecules. Support for these amendments can be found throughout the specification and at least on page 4, lines 6-8 and the paragraph bridging pages 10 and 11. Claims 1 and 56 were also amended to recite outputting a graph or graphs on an output device. Support for these amendments can be found at least on page 4, lines 6-8.

Claim 50 was amended to depend from claim 1 and to conform the language of the claim to the language of amended claim 1. Support can be found at least on page 4, lines 6-8 and the paragraph bridging pages 10 and 11.

Claim 53 was amended to recite a means for storing data representing graphs. Support for this amendment can be found throughout the specification and at least on page 4, lines 6-8 and the paragraph bridging pages 10 and 11. Claim 53 was also amended to recite a means for outputting a graph or graphs on an output device. Support for this amendment can be found at least on page 4, lines 6-8.

Claim 54 was amended to depend from claim 53 and to conform the language of the claim to the language of amended claim 53. Support can be found at least on page 4, lines 6-8 and the paragraph bridging pages 10 and 11.

Rejection Under 35 U.S.C. § 112, second paragraph

Claims 1-8, 11-29, 32-52, 56, and 61-63 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants respectfully traverse this rejection to the extent that it is applied to the claims as amended.

Claims 1, 50, 52, 56 and 61-63 were considered indefinite for being drawn to a computer-implemented method but failing to recite a computer implementation limitation. Although Applicants submit that the original claims would be clearly understood by those of skill in the art to include computer implementation (especially in light of the specification), the claims have been amended to explicitly require storage of relevant data and outputting of graphs that are the product of the method. Applicants submit that such operations are clear and definite and would be understood by those of skill in the art. Applicants have also removed the phrase “computer-implemented” from the preamble of the claims. Applicants submit that for at least this reason the claims do not include an inconsistency between the preamble and the body of the claims. Accordingly, Applicants assert that the claims are clear and definite and satisfy the requirements of 35 U.S.C. § 112, second paragraph.

Rejection Under 35 U.S.C. § 101

Claims 1-8, 11-29, 32-57, and 60-63 were rejected under 35 U.S.C. § 101 on the basis that the claimed invention is directed to non-statutory subject matter. Applicants respectfully traverse this rejection to the extent that it is applied to the claims as amended.

The claims were considered non-statutory on the basis that the claims involved manipulation or conversion of data without requiring material transformation of a material item or practical control or manipulation of a physical item.

Applicants have amended the claims to require output of graphs to an output device, thus producing an effect external to the data manipulation process. Applicants submit that the claims constitute statutory subject matter at least on this basis. *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed. Cir. 1998).

Regarding claims 53 and 54, drawn to a computer program product comprising a computer data medium, Applicants note that the claims are drawn to a composition of matter that includes recited means for performing data manipulations and outputting graphs. Applicants submit that the claims constitute statutory subject matter at least on this basis.

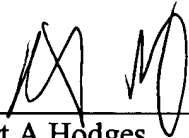
Pursuant to the above amendments and remarks, reconsideration and allowance of the pending application is believed to be warranted. The Examiner is invited and encouraged to directly contact the undersigned if such contact may enhance the efficient prosecution of this application to issue.

ATTORNEY DOCKET NO. 01173.0007U2
Application No. 09/918,938

A Credit Card Payment Form PTO-2038 authorizing payment in the amount of \$475.00, representing the fee for a small entity under 37 C.F.R. § 1.17(a)(3), and a Request for Three Month Extension of Time are enclosed. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

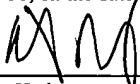


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8/24/2004
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